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**Citation:** Mena-Tudela, D., Cervera-Gasch, A., Castro-Sanchez, E., Santillan-Garcia, A., Andreu-Pejó, L. & González-Chordá, V. M. (2022). Necessary political competences for nurses from the perception of the student body: cross-sectional study in Spain. *Nurse Education Today*, 109, 105229.

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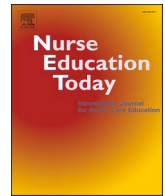
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## Research article

## Necessary political competences for nurses from the perception of the student body: Cross-sectional study in Spain

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## ARTICLE INFO

## Keywords:

Political competence  
Nursing  
Critical spirit  
Civic participation  
Health policy

## ABSTRACT

**Background:** Nursing should have a fundamental role in the development of health policies. The current state of the educational system regarding leadership-related skills and political competence in nursing students is a field to explore.

**Objectives:** To explore Spanish nursing students' perceptions about their political competence.

**Design:** Cross-sectional study that was carried out between December 2019 and June 2020.

**Settings and participants:** Students of the Degree in Nursing at the Universitat Jaume I (Spain).

**Methods:** An ad hoc scale composed of 33 items was designed. Sociodemographic variables of interest for the study were collected, such as participation in organizations. A descriptive analysis of the sample and the scale and a bivariate analysis were carried out.

**Results:** 91.8% ( $n = 90$ ) of items were answered by women. The 2nd (40.8%,  $n = 40$ ) and 4th (29.6%,  $n = 29$ ) courses were the most represented. 29.6% ( $n = 29$ ) belonged to some association or organization, with sports (31.1%,  $n = 9$ ), NGOs (17.2%,  $n = 5$ ), cultural (17.2%,  $n = 5$ ) and student organizations (13.8%,  $n = 4$ ) being the most represented. Within these associations, 48.3% ( $n = 14$ ) of participants claimed to have an active role. Statistically significant differences were observed by course in the Political Knowledge category ( $p = 0.030$ ). The variables "belonging to an organization" and "having an active role" in it seemed to have more influence on the scale than the rest of the sociodemographic variables.

**Conclusions:** Learning strategies must benefit from skills and prior experiences of students to strengthen new learning. It also seems to be important to emphasize that the theoretical basis is important, but that promoting civic participation among students can be very relevant for the acquisition of political competence.

## 1. Introduction

The World Health Organization has declared 2020–2021 as the International Year of Nurses and Midwives. Together with the International Council of Nurses, it has launched the "Nursing Now" campaign (Burdett Trust for Nursing, 2019) to raise the status and profile of nursing and achieve the triple impact of better health, greater gender equality and economic growth (APPG on Global Health, 2016). Both institutions recognize the need for nurses and midwives to have a more relevant role in the development of health policies due to its potential benefits for patients, professionals and health systems (Rafferty, 2018).

However, nurses must know in greater depth the mechanisms and

procedures by which the social contract between governments and citizens is established through public policies (Neuman, 2010), to influence the health and non-health policies that determine the distribution of available human resources and capital (Benton et al., 2017). This necessary knowledge, skills, and attitudes must be modeled from the beginning of a university education (Wilson et al., 2021); however, it appears that nursing education is not adequately responding to this challenge (Thomas et al., 2020) and little is known about how nursing students perceive this competence. Therefore, this article explores the perception that a sample of Spanish nursing students has about their political competence.

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<https://doi.org/10.1016/j.nedt.2021.105229>

Received 18 August 2020; Received in revised form 6 November 2021; Accepted 23 November 2021

Available online 27 November 2021

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## 2. Background

In the literature, different concepts with related meanings (political literacy, political efficacy, political astuteness, political awareness, political advocacy or political activism, policy influence) are used to refer to the knowledge, skills and capacity of nurses to influence the development of health policies (Arabi et al., 2014; Primomo and Björling, 2013; Woodward et al., 2016). In Spain, ‘nursing political competence’ has been defined as the set of skills, perspectives and values that nurses must have to develop effective political participation (Alberdi, 2019). This participation covers three different areas within the political context: participation in electoral processes to be elected to representative positions, political activism linked to the concept of social justice and citizenship advocacy, and technical advice in policy development (Mahlin, 2010; Santillan-Garcia et al., 2020).

Despite the lack of an adequate conceptual framework, nurses should have a fundamental role in the development of health policies, although their interest in being social representatives, their political activism and their participation as technical advisers is limited (MacDonald et al., 2012; Santillan-Garcia et al., 2020; Wilson et al., 2020). It is important to recognize that the political involvement of nurses must be more than advice from parliamentary science and technology offices (Santillan-Garcia et al., 2020) or tailored briefing notes (Kilpatrick et al., 2015). Involvement in nursing policy and politics needs to take place in decision-making environments. In this way, citizens will have the opportunity to benefit from the nursing perspective of global care for people and society (Santillan-Garcia et al., 2020). These improvements involve bringing the vision of care into the legislative and strategic sphere of health policies with the objective of: health for all and in all policies (Santillán-García, 2020).

Some of the barriers that provoke a lack of desire to exercise power among nurses are gender issues (Wilson et al., 2021; Woodward et al., 2016), lack of knowledge about legislative processes (Primomo and Björling, 2013; Santillán-García, 2020), a limited social vision of what a nurse is capable of doing (Mena Tudela and González Chordá, 2018), the sense of exclusion that the group itself has (Shariff, 2014) or the submissive nature of the profession in the face of decisions made (Lunardi et al., 2006). Moreover, the lack of collectivity and professional identity and unity are part of these added difficulties to the development of political competence in nursing (Wilson et al., 2021). On the other hand, some facilitators that allow the participation of the nursing community in the development of health policies include are also known, such as having the appropriate knowledge and skills, improving the image of nursing and creating structures, networks and processes that allow such participation (Shariff, 2014). Undergraduate education as well as competitive calls for funding for research on nursing policy and approaches to policy engagement could provide an important facilitator for the development of this competence (Santillan-Garcia et al., 2020).

The impact that the development of courses of political competence can have on the performance of future professionals is unknown (de Cordova et al., 2019). On the other hand, the evaluation of political competence in nursing students is a gap in the literature. Clark (1984) published the Political Astuteness Inventory (PAI) and Primomo (2007) provided evidence on its content validity and adequate internal consistency. The PAI is a questionnaire with 40 items organized in six thematic areas (voting behaviour, participation in professional or student organizations, awareness of health policy issues, knowledge of legislative and policy process, knowledge of elected officials, and involvement in political process). However, some authors criticize the absence of a clear conceptual framework (Byrd et al., 2012), and some have stated that the PAI should be revised, as it seems focused on the electoral process as part of the political process and should be updated based on technological development (Byrd et al., 2012). Furthermore, the questionnaire lacks a complete validation process and more research is needed to clarify the concept and measure of political astuteness (Primomo, 2007). In fact, some authors have adapted the questionnaire

before using it (Primomo, 2007), while others have decided to use ad hoc questionnaires that have not been validated (Thomas et al., 2020).

Exploring the current state of the educational system regarding the skills related to leadership and political competence in nursing students, can provide valuable information that contributes to decision-making by educational institutions, professional organizations and regulatory bodies when it comes to establishing improvements in the education of future nurses. However, the available research is very scarce, and most studies have been carried out in the United States and focus on evaluating interventions to improve the political astuteness of nursing students, leaving aside the evaluation of aspects such as knowledge, skills and attitudes that are necessary to develop political competence. For this reason, the objective of this study in Spain was focused on exploring the perceptions of nursing students about their political competence.

## 3. Methods

### 3.1. Design

A cross-sectional study was carried out in the nursing degree at the Universitat Jaume I (Spain). Cross-sectional design is a type of cross-sectional study that allows for measuring outcomes and studying associations between variables. Participants in this type of study are simply selected according to the inclusion and exclusion criteria established for the study (Setia, 2016). The study was carried out between December 2019 and June 2020.

### 3.2. Sample

The study population consisted of 360 students of the nursing degree ( $N = 360$ ). All students enrolled in any of the four nursing degree courses were included through non-probabilistic intentional sampling. Questionnaires with less than 90% completion were excluded. A sample of 110 participants was sufficient considering a 95% confidence interval, a precision of 0.08 and a loss percentage of 5%.

### 3.3. Variables and instruments

Due to the lack of validated instruments at the international level and in the Spanish context, to study the political competence of nursing students, the research team designed an ad hoc questionnaire with a set of items on knowledge, skills and attitudes related to nursing political competence. First, the existing literature was reviewed in order to identify concepts related to the development of political competence in nurses. Two members of the research team developed a battery of items and, finally, the research team agreed on a list of 33 items linked to key concepts that the literature relates to political competence in nursing such as power, moral courage, critical thinking and reflection, nursing social image, labor factors, social justice, scientific evidence and moral neglect (Alberdi, 2019). Items were grouped into three categories (knowledge, skills, and attitudes) and a Likert-type response scale was established (from 1 = strongly agree to 5 = strongly disagree). The scale items are shown in Table 1. The internal consistency measured in Cronbach's alpha for the entire scale was 0.927 (excellent). The grouped items showed a Cronbach's alpha of 0.719 for Attitudes (acceptable), of 0.808 for Knowledge (good) and of 0.898 for Skills (good).

Sociodemographic variables were collected such as current course (first, second, third, fourth), gender (male, female), work experience in the health system (yes, no), current job (yes, no), perceived social class (low, medium, high), income (less than 300 euros per month, 300–600 euros per month, 600–1000 euros per month and more than 1000 euros per month), membership in an association or organization of any kind (yes, no) and perception of an active role in it (yes, no).

**Table 1**

List of items that make up the questionnaire on political competence in students of the Degree in Nursing.

Item no.	Type	Item title
1	Attitudes	I think that nursing has the power to make changes in certain public policies
2		I know I have enough power to make policy changes, but I don't know how to apply it
3		Nursing must defend and act in accordance with ethical principles when these are threatened, taking into account the perceived risks
4		I think the social image of nurses is good
5		I think that nursing has a good image within the healthcare team
6		Nursing working conditions influence nursing participation in public policies
7		I believe that nursing is a piece for change in public policies as it has a holistic vision of the users
8		I believe that nurses work against social injustice
9		I think that nursing needs support from other groups to participate in public policies
10		My position as a student does not allow me to express myself openly
11		Nursing lacks the necessary skills to formulate health and social policies
12		I think that the use of scientific evidence is an essential pillar when making policies
13	Skills	I am able to defend and act in accordance with ethical principles when these are threatened, weighing the perceived risks
14		I am able to reflect and apply critical thinking to carry out a change in a nursing practice
15		As a nursing student, I believe that I am acquiring the necessary skills to improve the social vision of nursing
16		I believe that I am capable of influencing the image that the healthcare team has about nursing
17		I feel capable of influencing public policies knowing the working conditions of nursing
18		I am able to carry out people-centered care and to be able to carry out, through this, proposals for political changes in favor of improving care.
19		I am able to work with ethical problems and apply measures for greater social justice
20		I feel able to overcome the lack of support to get involved in care policies
21		As a student, I find myself more capable of expressing myself openly about some policies that do not seem appropriate to me.
22		I feel capable of formulating policies to propose changes in health and social policies
23		I am able to apply scientific evidence to start generating political changes in my work
24		I am able to meet the needs evidenced, within the framework of professional responsibility and having the training to do so
25	Knowledge	I know that I must defend and act in accordance with ethical principles when they are threatened, evaluating the perceived risks.
26		I know that the image of nursing that the work team has can influence their confidence
27		I know that people-centered care allows a level of individualization and contextualization of policies that makes nursing have a unique vision for change
28		I know that nursing ethical codes establish that nurses are the guarantors of the rights of citizenship and that they must fight against social injustice
29		I know that the lack of support is an important point for nurse involvement in public policies
30		I know that, as a student, it is easier to express myself openly in the face of personal rejection of some policies related to care
31		I know that lack of self-confidence, as well as lack of skills, keeps nursing from getting involved in politics
32		I understand scientific evidence as one of the fundamental pillars to be able to build a nursing profession with greater participation in public policies

**Table 1 (continued)**

Item no.	Type	Item title
33		I know that I would incur in negligence if I did not cover the evident needs within the framework of professional responsibility, and having the training to do so

### 3.4. Data collection

Nursing students were invited to participate in the study in a face-to-face class by the teaching staff responsible for the study, with the prior permission of that teaching staff to collect the data. The students received information about the purpose of the study and accessed the questionnaire in online format via Google Forms®. It was understood that the students who accessed the electronic data collection form and completed the study gave their consent to participate in the study. Participation was voluntary, without said participation (or absence of it) influencing the student's academic results. The responses were anonymous, and no identifying elements were included about the participants, such as cookies or email.

### 3.5. Data analysis

A descriptive analysis was carried out on the qualitative variables with absolute frequencies and percentages, and on the quantitative variables with mean, maximum, minimum and standard deviation. The scores of the variables were recalculated, joining the items in the Knowledge, Skills and Attitudes categories in order to carry out a more in-depth analysis of the results. Lastly, a bivariate analysis was developed to determine which sociodemographic and control variables could be related to the items established in the Nursing Political Competence questionnaire itself. This statistical analysis depended on the nature of the variables, considering the applicability conditions of the tests. Chi-Square, Kruskal Wallis and Mann Whitney's U statistics (Kolmogorov-Smirnov:  $p < 0.001$ ) were used. The analysis was carried out with the Statistical Package for Social Sciences (SPSS) version 21. A level of statistical significance of  $p < 0.05$  was established.

### 3.6. Ethical considerations

The study complied with the relevant legal precepts, such as the Declaration of Helsinki (beneficence, non-maleficence, autonomy and justice) and Organic Law 03/2018, of December 5, on the Protection of Personal Data and Guarantee of Digital Rights. The study was approved by the Deontological Commission of the Universitat Jaume I (CD/21/2020).

## 4. Results

### 4.1. Sample description

A total of 98 questionnaires were obtained. 91.8% ( $n = 90$ ) were answered by women. The 2nd (40.8%,  $n = 40$ ) and 4th (29.6%,  $n = 29$ ) courses had the most representation. Only one student (1%) intended to drop out. 16.3% ( $n = 16$ ) of the participants had previously worked in the health system, and 56.3% ( $n = 9$ ) of these had less than one-year experience. At the time of data collection, 8.2% ( $n = 8$ ) of participants had a job, having an income range of between 600 and 1000 euros per month in 50% ( $n = 4$ ) of cases and less than 300 euros per month in 37.5% ( $n = 3$ ) of cases. 95.9% ( $n = 94$ ) of participants answered they were from the middle social class, whereas the remaining 4.1% ( $n = 4$ ) were classified as being of low socio-economic background. Two students (2%) had completed an international exchange. 29.6% ( $n = 29$ ) belonged to some association or organization, with sports (31.1%,  $n = 9$ ), NGOs (17.2%,  $n = 5$ ), cultural (17.2%,  $n = 5$ ) and student

organizations (13.8%,  $n = 4$ ) being the most represented. Within these associations, 48.3% ( $n = 14$ ) of the participants claimed to have an active role. Table 2 shows the results of the sociodemographic variables compared by courses.

#### 4.2. Results of the political competence questionnaire

Regarding attitudes (Me = 2.05, Range = 2.73, I-Q Range = 1.84–2.36), knowledge (Me = 2.10, Range = 3.30, I-Q Range = 1.60–2.50) and skills (Me = 2.33, Range = 3.67, I-Q Range = 2.00–2.75) of nursing political competence, statistically significant differences were observed by courses in the category of Political Knowledge (Table 3). Table 4 shows the results of each of the items of the political competence questionnaire by academic year.

When analyzing the sociodemographic variables with the items of the political competence questionnaire, the gender variable showed statistically significant differences with the item “I know that I would incur in negligence if I did not cover the evident needs within the framework of professional responsibility, and having the training to do so” (Female: Me = 2.00, Range = 4, I-Q Range = 1.00–3.00; Man: Me = 1.00, Range = 1, I-Q Range = 1.00–2.00;  $p < 0.05$ ). Having previously worked in the health system influenced the items “I think the social image of nurses is good” (Yes: Me = 2.00, Range = 3, I-Q Range = 1.00–2.00; No: Me = 3.00, Range = 4, I-Q Range = 2.00–4.00;  $p < 0.05$ ) and “I think nursing is a piece for change in public policies, as it has a holistic view of users” (Yes: Me = 2.00, Range = 2, I-Q Range = 1.75–2.25; No: Me = 1.00, Range = 4, I-Q Range = 1.00–2.00;  $p = 0.055$ ). Being currently working showed statistically significant differences in the items “Political knowledge” (Yes: Me = 2.50, Range = 0.60, I-Q Range = 2.30–2.75; No: Me = 2.10, Range = 3.30, I-Q Range = 1.80–2.40;  $p < 0.05$ ); “I think that nursing needs support from other groups to participate in public policies” (Yes: Me = 3.00, Range = 2, I-Q Range = 2.00–3.25; No: Me = 2.00, Range = 4, I-Q Range = 1.00–2.50;  $p < 0.05$ ); “I think that the use of scientific evidence is an essential pillar when making policies” (Yes: Me = 2.00, Range = 2, I-Q Range = 1.00–2.25; No: Me = 1.00, Range = 4, I-Q Range = 1.00–2.00;  $p = 0.054$ ); and “I understand scientific evidence as one of the fundamental pillars to be able to build a nursing profession with greater participation in public policy” (Yes: Me = 2.00, Range = 2, I-Q Range = 1.75–3.00; No: Me = 1.00, Range = 4, I-Q Range = 1.00–2.00;  $p < 0.05$ ).

Tables 5 and 6 show the results for the variables “belong to an organization” and “having an active role in it”.

#### 5. Discussion

This study assessed how nursing students at the Universitat Jaume I (Spain) perceived nursing political competence regarding three different categories: political attitudes, knowledge and skills. In general, our results showed that political knowledge was related to the student's academic year; however, the categories of attitudes and skills did not show such association. The item “Active role in an organization” seems to have more weight in the perception of political competences, both in the questionnaire items and in the category of political skills. Therefore, it is important to highlight the comparatively modest role that a university education plays in the development of political competencies, compared to efforts to foster student civic participation. This civic participation may be responsible for creating leadership in people and belief in political competence as a nursing responsibility, as well as obviously resulting in other individual and collective benefits.

Currently, two movements place nurses at the right time and place to speak up and promote a movement for change in the political arena. On the one hand, the Triple Impact Report (APPG on Global Health, 2016) concludes that the empowerment of nurses will achieve an improvement in health worldwide and greater gender equality due to a high representation of women in the profession (Boniol et al., 2019). These contributions coincide with our findings, with the female population being the most represented. On the other hand, the Nursing Now movement (Anthony, 2019; Crisp and Iro, 2018) aims to raise the nursing profile and improve the situation of nurses around the world, promoting their influence and contributions to controlling the access of the world population to healthcare. Apparently, the impact of these initiatives may be long term. Currently, the great pressure to which nurses have been subjected (Mo et al., 2020), and the lack of influence of nursing during the COVID-19 pandemic are evident (Al-Mandhari et al., 2020; Santillan-Garcia et al., 2020).

In order for these initiatives to create true long-term changes, it is necessary to create structures, networks and processes that allow nurses to participate in decision-making and policy development processes (Woodward et al., 2016), as perceptions of these networks and support structures is very low among nursing students as the results show. Moreover, the results show that it is crucial to improve the social and academic image of nursing and fund nursing research in health policies (Shariff, 2014). It is therefore necessary that nurses receive training and develop their political competency within a well-defined competency framework (Scammell et al., 2020; Turale and Kunaviktikul, 2019), from the beginning of their university education (Santillan-Garcia et al.,

**Table 2**  
Sociodemographic variables of the sample by academic year ( $n = 98$ ).

Variable	First ( $n = 12$ )		Second ( $n = 40$ )		Third ( $n = 17$ )		Fourth ( $n = 29$ )		p-Value <sup>a</sup>
	n	%	n	%	n	%	n	%	
Sex									0.487
Male	–	–	3	7.5	1	5.9	4	13.8	
Female	12	100	37	92.5	16	94.1	25	86.2	
Previous work in the health system									0.075
No	10	83.3	29	72.5	16	94.1	27	93.1	
Yes	2	16.7	11	27.5	1	5.9	2	6.9	
Current job									0.136
No	9	75.0	37	92.5	16	94.1	28	96.6	
Yes	3	25.0	3	7.5	1	5.9	1	3.4	
Perceived social class									0.857
Lower	–	–	2	5.0	1	5.9	1	3.4	
Middle	12	100	38	95.0	16	94.1	28	96.6	
Member of an association or organization									0.985
No	9	75.0	28	70.0	12	70.6	20	69.0	
Yes	3	25.0	12	30.0	5	29.4	9	31.0	
Active role									0.815
No	1	33.3	7	58.3	3	60.0	4	44.4	
Yes	2	66.7	5	41.4	2	40.0	5	55.6	

<sup>a</sup> Chi-squared test.

**Table 3**

Attitudes, knowledge and skills regarding political competence by academic year (n = 98).

	First (n = 12)		Second (n = 40)		Third (n = 17)		Fourth (n = 29)		p <sup>c</sup>
	Me <sup>a</sup> (range)	I-Q <sup>b</sup> range	Me <sup>a</sup> (range)	I-Q <sup>b</sup> range	Me <sup>a</sup> (range)	I-Q <sup>b</sup> range	Me <sup>a</sup> (range)	I-Q <sup>b</sup> range	
Political attitudes	2.36 (1.27)	2.04–2.54	2.00 (2.27)	1.72–2.27	2.00 (0.91)	1.84–2.45	2.18 (2.64)	1.93–2.36	0.129
Political knowledge	2.20 (1.50)	2.10–2.40	2.10 (3.20)	1.88–2.50	1.80 (1.10)	1.62–2.00	2.30 (2.70)	2.00–2.77	0.030
Political skills	2.33 (1.67)	1.79–2.87	2.13 (3.67)	1.83–2.68	2.21 (1.92)	2.02–2.42	2.54 (3.00)	2.19–2.83	0.126

<sup>a</sup> Median.

<sup>b</sup> Interquartile range = Q1–Q3.

<sup>c</sup> Kruskal-Wallis test.

**Table 4**

Results of the items of the political competence questionnaire by academic year (n = 98).

Item no.	First (n = 12)		Second (n = 40)		Third (n = 17)		Fourth (n = 29)		p <sup>c</sup>
	Me <sup>a</sup> (range)	I-Q <sup>b</sup> range	Me <sup>a</sup> (range)	I-Q <sup>b</sup> range	Me <sup>a</sup> (range)	I-Q <sup>b</sup> range	Me <sup>a</sup> (range)	I-Q <sup>b</sup> range	
1	2.50 (3)	2.00–3.75	2.00 (4)	1.00–2.75	2.00 (3)	1.50–2.00	2.00 (4)	1.00–3.00	0.278
2	3.00 (3)	2.00–3.75	2.50 (4)	2.00–3.00	3.00 (4)	1.50–3.00	3.00 (4)	2.50–4.00	0.180
3	2.00 (1)	1.00–2.00	1.00 (4)	1.00–2.00	2.00 (2)	1.00–2.00	2.00 (4)	1.00–2.00	0.800
4	3.00 (3)	2.00–3.75	2.00 (4)	2.00–3.00	2.00 (3)	2.00–4.00	3.00 (3)	2.00–4.00	0.088
5	2.00 (3)	2.00–3.00	2.00 (3)	1.00–3.00	2.00 (4)	2.00–2.00	2.00 (4)	2.00–3.00	0.223
6	2.00 (2)	2.00–3.00	2.00 (4)	1.00–2.00	1.50 (2)	1.00–3.00	2.00 (4)	1.00–3.00	0.577
7	2.00 (2)	1.00–3.00	2.00 (4)	1.00–2.00	1.00 (1)	1.00–2.00	1.00 (4)	1.00–2.50	0.319
8	2.00 (2)	2.00–2.25	2.00 (4)	1.00–2.00	2.00 (3)	2.00–3.00	2.00 (4)	2.00–3.00	0.191
9	3.00 (2)	1.50–3.00	2.00 (4)	1.00–2.00	2.00 (3)	1.00–3.50	2.00 (4)	1.00–3.50	0.349
10	3.00 (3)	2.00–3.00	2.50 (3)	2.00–3.00	2.50 (4)	2.00–4.00	2.00 (4)	1.00–2.50	0.050
11	3.00 (3)	3.00–3.50	4.00 (4)	2.00–5.00	3.00 (4)	2.00–4.00	4.00 (4)	2.50–4.00	0.499
12	1.00 (2)	1.00–2.00	1.00 (4)	1.00–1.00	1.00 (1)	1.00–1.00	1.00 (4)	1.00–2.00	0.111
13	2.00 (2)	1.25–2.75	2.00 (4)	1.00–3.00	2.00 (2)	2.00–2.00	2.00 (4)	1.50–2.00	0.915
14	2.00 (2)	1.00–3.00	2.00 (4)	1.00–2.00	2.00 (2)	2.00–2.00	2.00 (4)	1.00–3.00	0.506
15	1.00 (2)	1.00–2.00	2.00 (4)	1.00–2.00	1.00 (2)	1.00–2.00	2.00 (4)	1.00–2.50	0.150
16	2.00 (3)	1.00–2.00	2.00 (4)	1.00–2.00	2.00 (4)	1.00–2.25	2.00 (4)	2.00–3.00	0.146
17	2.00 (3)	2.00–3.00	2.00 (4)	2.00–3.00	3.00 (4)	2.00–3.00	3.00 (2)	2.00–4.00	0.122
18	2.00 (2)	1.00–2.25	2.00 (4)	1.00–2.00	2.00 (4)	1.00–3.00	2.00 (4)	2.00–3.00	0.073
19	2.00 (2)	1.50–2.00	2.00 (4)	1.00–2.00	2.50 (3)	2.00–3.00	2.00 (4)	2.00–3.00	0.234
20	3.00 (2)	2.00–3.00	3.00 (4)	2.00–3.00	3.00 (3)	2.00–3.75	3.00 (3)	2.00–3.00	0.839
21	3.00 (2)	2.00–4.00	3.00 (4)	2.00–4.00	3.00 (2)	2.00–3.75	4.00 (4)	2.50–4.00	0.163
22	3.00 (2)	2.50–4.00	3.00 (3)	3.00–4.00	3.00 (3)	3.00–4.00	3.00 (3)	3.00–4.00	0.870
23	2.00 (2)	1.00–3.00	2.00 (3)	2.00–3.00	2.00 (4)	2.00–2.00	2.00 (4)	2.00–3.00	0.329
24	2.00 (2)	1.50–2.50	2.00 (3)	2.00–3.00	2.00 (4)	2.00–2.75	3.00 (4)	2.00–3.00	0.275
25	2.00 (1)	1.00–2.00	2.00 (4)	1.00–2.00	2.00 (2)	1.00–2.00	2.00 (4)	1.00–2.50	0.801
26	1.00 (2)	1.00–2.00	2.00 (4)	1.00–2.00	1.00 (1)	1.00–2.00	2.00 (4)	1.00–2.00	0.177
27	2.00 (2)	1.75–2.00	2.00 (4)	1.00–2.00	1.00 (2)	1.00–2.00	2.00 (4)	1.00–3.00	0.034
28	2.00 (2)	1.50–3.00	2.00 (4)	1.00–3.00	2.00 (2)	2.00–3.00	2.00 (4)	2.00–3.00	0.691
29	2.00 (2)	1.50–2.00	2.00 (4)	1.00–2.00	2.00 (2)	1.00–2.00	2.00 (4)	1.00–2.00	0.937
30	3.00 (2)	2.00–4.00	3.50 (4)	3.00–4.00	3.00 (2)	2.25–4.00	4.00 (4)	3.00–4.00	0.280
31	3.00 (4)	2.00–3.50	3.00 (4)	2.00–4.00	2.00 (3)	1.00–2.00	3.00 (4)	2.00–4.00	0.008
32	1.00 (2)	1.00–2.50	1.00 (4)	1.00–2.00	1.00 (2)	1.00–1.00	1.00 (4)	1.00–3.00	0.207
33	3.00 (3)	1.50–3.00	2.00 (4)	1.00–2.00	2.00 (1)	1.00–2.00	2.00 (4)	2.00–3.00	0.045

<sup>a</sup> Median.

<sup>b</sup> Interquartile range = Q1–Q3.

<sup>c</sup> Kruskal-Wallis test.

**Table 5**

Attitudes, knowledge and skills regarding political competition according to belonging to an organization and maintaining an active role in it.

	Member of an organization				p <sup>c</sup>	Active role in an organization				p <sup>c</sup>
	Yes (n = 29)		No (n = 69)			Yes (n = 14)		No (n = 15)		
	Me <sup>a</sup> (range)	I-Q <sup>b</sup> range	Me <sup>a</sup> (range)	I-Q <sup>b</sup> range		Me <sup>a</sup> (range)	I-Q <sup>b</sup> range	Me <sup>a</sup> (range)	I-Q <sup>b</sup> range	
Political attitudes	2.00 (2.64)	1.81–2.27	2.09 (2.55)	1.90–2.36	0.262	2.12 (2.64)	1.82–2.55	1.91 (0.73)	1.82–2.02	0.083
Political knowledge	2.10 (2.70)	1.60–2.30	2.20 (3.30)	1.97–2.50	0.109	2.30 (2.70)	1.60–2.70	1.90 (1.10)	1.60–2.22	0.122
Political skills	2.08 (3.33)	1.83–2.75	2.33 (3.42)	2.08–2.75	0.345	2.67 (2.75)	2.08–3.17	1.92 (1.67)	1.92–2.48	0.014

<sup>a</sup> Median.

<sup>b</sup> Interquartile range = Q1–Q3.

<sup>c</sup> Mann-Whitney U test.

2020; Turale and Kunaviktikul, 2019) and at the master and doctorate levels (Kung and Rudner Lugo, 2015; Turale and Kunaviktikul, 2019). It is important to highlight that training should be integrated into

regulated study plans (Turale and Kunaviktikul, 2019) because lack of time, knowledge and lack of interest are the barriers that students most highlight when it comes to participating in these activities (Byrd et al.,



Table 6

Results of the items of the political competence questionnaire for belonging to an organization and maintaining an active role in it.

Item no.	Member of an organization				p <sup>c</sup>	Active role in an organization				p <sup>c</sup>
	Yes (n = 29)		No (n = 69)			Yes (n = 14)		No (n = 15)		
	Me <sup>a</sup> (range)	I-Q <sup>b</sup> range	Me <sup>a</sup> (range)	I-Q <sup>b</sup> range		Me <sup>a</sup> (range)	I-Q <sup>b</sup> range	Me <sup>a</sup> (range)	I-Q <sup>b</sup> range	
1	2.00 (4)	1.00–3.00	2.00 (4)	1.00–2.50	0.532	2.00 (4)	2.00–3.25	2.00 (3)	1.00–3.00	0.194
2	1.00 (4)	2.00–3.50	3.00 (4)	2.00–4.00	0.284	3.00 (3)	2.00–3.25	2.00 (3)	2.00–4.00	0.313
3	2.00 (4)	1.00–2.00	2.00 (4)	1.00–2.00	0.514	1.00 (4)	1.00–2.00	1.00 (2)	1.00–2.00	0.896
4	2.00 (4)	2.00–4.00	2.00 (4)	2.00–4.00	0.975	2.00 (4)	2.00–4.00	2.00 (3)	2.00–4.00	0.396
5	2.00 (4)	2.00–3.00	2.00 (4)	2.00–3.00	0.737	2.00 (3)	2.00–3.50	2.00 (4)	1.00–3.00	0.298
6	1.50 (4)	1.00–2.00	2.00 (4)	1.00–3.00	0.158	2.00 (4)	1.00–3.00	1.00 (2)	1.00–2.00	0.132
7	1.00 (4)	1.00–2.00	2.00 (4)	1.00–2.00	0.530	2.00 (4)	1.00–2.50	1.00 (2)	1.00–2.00	0.102
8	2.00 (4)	2.00–3.00	2.00 (4)	2.00–3.00	0.802	2.00 (4)	2.00–3.00	2.00 (2)	1.75–2.00	0.028
9	1.00 (4)	1.00–2.00	2.00 (4)	1.00–3.00	0.259	2.00 (4)	1.00–4.00	1.00 (1)	1.00–2.00	0.042
10	2.00 (4)	2.00–3.00	2.00 (4)	2.00–3.00	0.983	2.50 (4)	2.00–3.75	2.00 (3)	1.00–3.00	0.160
11	3.00 (4)	2.00–4.00	3.50 (4)	2.25–4.00	0.339	2.00 (3)	1.00–4.00	4.00 (3)	3.00–5.00	0.015
12	1.00 (4)	1.00–1.00	1.00 (4)	1.00–2.00	0.350	1.00 (4)	1.00–3.00	1.00 (1)	1.00–1.00	0.308
13	1.00 (4)	1.00–2.00	2.00 (4)	2.00–2.50	0.095	2.00 (4)	1.00–3.00	1.00 (2)	1.00–2.00	0.097
14	2.00 (4)	1.00–2.00	2.00 (4)	1.00–2.00	0.476	2.00 (4)	1.50–3.00	1.00 (2)	1.00–2.00	0.034
15	2.00 (4)	1.00–2.00	2.00 (4)	1.00–2.00	0.749	2.00 (4)	1.00–3.00	1.00 (2)	1.00–2.00	0.065
16	2.00 (4)	1.00–3.00	2.00 (4)	1.00–2.00	0.908	2.00 (4)	1.00–3.00	2.00 (4)	1.00–2.00	0.560
17	2.00 (3)	2.00–3.00	3.00 (4)	2.00–3.25	0.123	3.00 (2)	2.00–3.00	2.00 (3)	2.00–3.00	0.273
18	2.00 (4)	1.00–2.00	2.00 (4)	2.00–3.00	<b>0.036</b>	2.00 (4)	1.00–2.50	2.00 (2)	1.00–2.00	0.337
19	2.00 (4)	1.00–2.00	2.00 (4)	2.00–3.00	0.418	2.00 (4)	2.00–3.00	2.00 (3)	1.00–2.00	0.169
20	2.00 (4)	2.00–3.00	3.00 (4)	2.00–3.00	0.079	3.00 (3)	2.00–4.00	2.00 (3)	2.00–2.25	0.020
21	3.00 (4)	2.00–4.00	3.00 (4)	2.00–4.00	0.202	3.00 (3)	2.25–4.00	2.50 (3)	2.00–4.00	0.572
22	3.00 (4)	2.00–4.00	3.00 (3)	3.00–4.00	0.286	3.50 (3)	3.00–4.75	3.00 (2)	2.00–3.00	0.035
23	2.00 (4)	2.00–2.00	2.00 (4)	2.00–3.00	0.397	2.00 (3)	2.00–3.00	2.00 (1)	1.00–2.00	0.003
24	2.00 (4)	2.00–3.00	2.00 (4)	2.00–3.00	0.942	3.00 (3)	2.00–3.00	2.00 (2)	1.00–2.25	0.013
25	2.00 (4)	1.00–2.00	2.00 (4)	1.00–2.00	0.243	2.00 (4)	1.00–3.00	1.00 (2)	1.00–2.00	0.019
26	1.50 (4)	1.00–2.00	2.00 (4)	1.00–2.00	0.600	2.00 (4)	1.00–2.00	1.00 (1)	1.00–2.00	0.164
27	2.00 (4)	1.00–2.00	2.00 (4)	1.00–2.00	0.171	2.00 (4)	1.00–2.50	1.00 (1)	1.00–2.00	0.164
28	2.00 (4)	1.00–3.00	2.00 (4)	2.00–3.00	0.177	2.00 (4)	1.00–3.00	2.00 (2)	1.00–2.25	0.399
29	2.00 (4)	1.00–2.00	2.00 (4)	1.00–2.00	0.308	2.00 (4)	1.50–3.00	1.00 (2)	1.00–2.00	0.023
30	3.00 (4)	3.00–4.00	4.00 (3)	3.00–4.00	0.275	3.00 (3)	2.00–4.00	3.50 (3)	3.00–4.00	0.140
31	3.00 (4)	2.00–4.00	3.00 (4)	2.00–4.00	0.471	2.00 (3)	1.00–4.00	3.00 (4)	2.00–4.25	0.207
32	1.00 (4)	1.00–1.50	1.00 (4)	1.00–2.00	0.492	1.00 (4)	1.00–3.00	1.00 (1)	1.00–1.00	0.023
33	2.00 (4)	1.00–2.00	2.00 (4)	1.00–3.00	0.203	2.00 (4)	1.00–3.00	1.00 (2)	1.00–2.00	0.060

<sup>a</sup> Median.

<sup>b</sup> Interquartile range = Q1–Q3.

<sup>c</sup> Mann Whitney U test.

2012; Des Jardin, 2001; Primomo and Björling, 2013). By contrast, teachers highlight the main problems as lack of interest, lack of financial support and lack of administrative support (Staeble et al., 2017). Other variables such as personality traits in terms of leadership and political competence or the environment in which the student is educated, may also have an influence, and should be therefore be studied in future research.

From our experience and the existing literature, it seems evident that a minimum specific educational intervention on political competence could change the results of the scale, improving at least the knowledge related to the political competence of the students in the Nursing degree (Adams, 2019; O'Neill, 2016; Rubenstein and Graham, 2011). But the acquisition of basic knowledge is not the expected result when working with nursing political competence; rather, training in political competence aims to influence the social activism of the profession (Wilson et al., 2020), its character (Lunardi et al., 2006), and the perception that affects the gender of the profession (Woodward et al., 2016). All the barriers against the improvement of said political competency not only relate to an increase in knowledge of political competence, but also to the normative process of creating legislation. It seems that nursing in the United States seen an increase in participation in public policies (Turale and Kunaviktikul, 2019). Yet, previous studies, such as Des Jardin (2001), found that 49% of nursing undergraduate and graduate students were not politically aware. Byrd et al. (2012) observed that more than 90% of nursing students who participated in their study were little or not at all aware of the implications of political activity for nursing, while this percentage was 69% in the study of Primomo and Björling (2013). However recently, Thomas et al. (2020) concluded that American

nursing students recognize the value of health policies, but have moderate levels of political competence and their main activities at the political level are very basic (voting, belonging to student organizations, and following issues of nursing and medical care). Similar results were obtained in the present study.

Therefore, for the consolidation of a structured political competence, an experiential part is required (Morris et al., 2019), which increases the capacity and motivation of nursing students towards political action. The results of our study seem to follow this same line as having an active role within an organization or association was shown to make a difference and create a stronger perception of the political competence of nurses (McKeown, 2020). This capacity of nurses is necessary to influence decisions and issues related to health, through knowledge of policies, effective communication, and collaboration with other members of the health team. In addition, it contributes to improving the work environment for nurses and results for patients (Arabi et al., 2014).

Among the main limitations of our study is the fact that we did not collect the 110 necessary questionnaires indicated by the estimation of the sample size. One of the main reasons may have been that, as it was a voluntary participation, many students did not want to participate, although based on the literature, the low interest that the central topic of the study arouses seems to be the main problem (Byrd et al., 2012; Des Jardin, 2001; Primomo and Björling, 2013). The results obtained are from a single university; therefore, it is necessary to exercise caution when extrapolating them to other environments. More studies at more universities are necessary to have more solid results on nursing political competence. Finally, although the internal consistency of the questionnaire was excellent ( $\alpha = 0.927$ ) and the relevance of the factor analysis



was verified through the KMO (KMO = 0.836) and Bartlett tests ( $p < 0.001$ ), the lack of an adequate sample prevented its validation. Future studies should validate this tool despite the high internal consistency demonstrated. Considering more socio-demographic variables like age in future studies will also be important.

## 6. Conclusion

In general terms, the academic year did not produce statistically significant differences in skills or attitudes, but it did produce differences in the knowledge that the students of the Nursing Degree have about nursing political competence.

Developing learning strategies around the promotion and acquisition of nursing political competence seems essential, but it must be considered that experience and knowledge form an essential tandem, which should not be forgotten, as in the present study having an active role in an organization proved to be the turning point that makes the difference in the perception of political competence. While it is important to give sufficient importance to training, which helps in achieving a robust theoretical and empirical basis, efforts should also be directed towards fostering students' civic participation. This civic participation may be responsible for creating leadership in people and believing in political competition as a nursing responsibility.

## CRediT authorship contribution statement

The details of authorship of the work are as follows:

- Desirée Mena-Tudela and Enrique Castro-Sanchez conceived and designed the study.
- Desirée Mena-Tudela collected the data and worked on the database.
- Desirée Mena-Tudela analyzed, interpreted the data and wrote the article.
- Desirée Mena-Tudela, Azucena Santillán-García, Víctor Manuel González-Chordá and Enrique Castro-Sanchez supervised the whole process and reviewed the article, with important intellectual contributions.
- The final version of the article was approved by the entire team.

## Declaration of competing interest

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

## Acknowledgements

We would like to thank the Universitat Jaume I for the ECS grant. A grant was awarded for a short-term teaching mobilities by visiting lecturer from foreign universities to deliver instruction in English in the 2019/20 academic year.

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